

**PATENT CLAIMS**

1. Arrangement for correcting colour video signals, in particular colour video signals generated by a film scanner, with a matrix (16), through which the colour video signals pass and which can be used to control the proportions of three primary colours in matrixed colour value signals, characterized in that provision is made of means (31 to 39) for controlling the matrix (16) in a manner dependent on the hue which the colour video signals respectively represent.
2. Arrangement according to Claim 1, characterized in that provision is made of memories (31) for storing coefficients of the matrix (16) that are set previously in a manner dependent on the hue.
3. Arrangement according to Claim 1, characterized in that provision is made of memories (31) for storing correction values for the coefficients of the matrix (16), the said correction values being set previously in a manner dependent on the hue.
4. Arrangement according to one of Claims 1 to 3, characterized in that provision is made of means (32, 34) for reducing the effect of the correction in the case of low colour saturation.
5. Arrangement according to one of Claims 2 to 4, characterized in that a converter (33, 34) for generating a hue signal from the colour video signals is connected by its output to address inputs of the memories (31).
6. Arrangement according to Claim 5, characterized in that the converter (33, 34) has a further output, which carries a colour saturation signal and is connected to multipliers (32) located in the supply lines of the

correction values to the matrix (16).

7. Arrangement according to either of Claims 5 and 6, the colour video signals being present as colour value  
5 signals, characterized in that the converter comprises a converter matrix (33) for generating colour difference signals and a coordinate converter (34).

8. Arrangement according to one of Claims 5 to 7,  
10 characterized in that the matrix (16) comprises nine further multipliers (4 to 12) and three adders (13, 14, 15), in each case three further multipliers (4, 5, 6; 7, 8, 9; 10, 11, 12) being connected to inputs of an adder (13, 14, 15) and having three colour video  
15 signals - fed as colour value signals - applied to them, and in that a correction value/coefficient can be fed to a respective one of the further multipliers (4 to 12) from one of the memories (31).

20 9. Arrangement according to one of Claims 2 to 8, characterized in that the correction values can be loaded into the memories (31) from a computer (39), and in that the computer (39) has a program for setting the correction values.

25 10. Arrangement according to Claim 9, characterized in that provision is made of a manual setting of the correction values.

30 11. Arrangement according to either of Claims 9 and 10, characterized in that provision is made of an automatic determination of the correction values by scanning of a test film and comparison of the scanned values with desired values.

35 12. Arrangement according to either of Claims 10 or 11, characterized in that provision is made of the determination of the correction values for support

points and the obtaining of the correction values for the further hue values by interpolation.

13. Arrangement according to one of the preceding  
5 claims, characterized in that logarithmizers (17, 18, 19) are connected upstream of the matrix (16) and delogarithmizers (20, 21, 22) are connected downstream of the matrix (16).

10 14. Arrangement according to one of the preceding claims, characterized in that the correction values stored in the memories (31) are furthermore dependent on the colour saturation in an adjustable manner.